

## ABSTRACT

The invention is directed to methods of treating asthma, COPD, allergic rhinitis, and infectious rhinitis by administering a first pharmaceutical agent including one or more compounds selected from the quarternary ammonium compounds of  
5 formulae I-V and a second pharmaceutical agent including one or more pharmaceutical agents selected from Adenosine A<sub>2a</sub> Receptor Agonists, D2-Dopamine Receptor Agonists, Phosphodiesterase Inhibitors (PDE's), corticosteroids, norepinephrine reuptake inhibitors, 4-hydroxy-7-[2-[2-[3- [2-phenylethoxy]-propylsulphonyl]ethyl] -1,3-benzothiazol-2(3H)-one, and  
10 pharmaceutically acceptable salts thereof, and non-quarternized antimuscarinic compounds.